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Negotiating the farmland dilemmas: ‘barefoot planners’ in China’s urban periphery

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Abstract. China is confronted with three intrinsic dilemmas related to farmland conversion: (1) conserving farmland for national food security versus converting farmland to boost local government income; (2) protecting farmland to ensure the basic living conditions of vulnerable farmers versus developing farmland to encourage farmers’ transition toward urban livelihoods; (3) preserving farmland by exercising national regulatory controls versus managing farmland through localised negotiations among the concerned stakeholders. This paper analyses three cases based on interview data collected from Shanghai, Guizhou, and Henan between 2009 and 2012. Each case consists of an informal local resolution to one of the three farmland dilemmas, and involves a variety of actors—local entrepreneurs, ethnic minority farmers, and village committee members—who act as ‘barefoot planners’. On the basis of these findings, this paper makes a series of policy recommendations and calls for more flexible, spontaneous, and place-based farmland planning in China through social learning.

Keywords: China, farmland, informal planning, social learning

1 Introduction

Farmland conversion is one of the most pressing planning issues in contemporary China. On one hand, rapid urbanisation and phenomenal economic growth in China have been very much supported by extensive farmland development in the urban periphery (Ho and Lin, 2004; Tang and Chung, 2002). Farmland, once converted to urban uses, proves to be important collateral that can attract external capital to promote the local economy and public finance (Zhu, 2004a, 2004b). Associated with this trend is the structural transition in the labour market, whereby the traditionally agrarian population in the urban periphery typically enters off-farm employments en masse (Selden, 1998).

On the other hand, China needs to feed its huge population with merely ~0.1 ha of arable land per capita (Lin and Ho, 2003). Serious concerns about food security have propelled the state to take a conservationist stance. Preserving farmland is clearly stated in Article 3 of China’s Land Management Law as a long-term nationwide land-use policy (National People’s Congress, 1998). The latest national five-year plan (2011–15) further stipulates that China aims to maintain a minimum stock of 121 million ha of arable land resources and continue to protect farmland strictly (National People’s Congress, 2011).

Nevertheless, in practice, farmland conservation has never been implemented with full faith (Lichtenberg and Ding, 2008). Enforcement has been difficult, especially in China’s urban periphery, where both the local authorities and farmers tend to prioritise economic development and off-farm livelihoods (Wang and Scott, 2008). The national farmland planning system seems to be challenged locally by the market economy’s ubiquitous presence, let alone the intellectual debates about whether farmland is worth conserving at all (Boland, 2000).

This paper addresses the issue of farmland conversion in China on the basis of three cases collected in the coastal municipality of Shanghai and the inland provinces of Guizhou and Henan, respectively. Each of the three cases illustrates a failure of the official state-led farmland planning system. In the meantime, all of the cases also reflect the existence of highly localised negotiation-based informal planning mechanisms, led by actors such as local entrepreneurs, ethnic minority farmers, and village committee members, who manage to address the variegated practical tensions related to farmland conversion as ‘barefoot planners’ (Zinn et al, 1993).

This study has both substantive and intellectual implications. With regard to farmland use policy in China, this paper calls for more flexible, spontaneous, and place-based farmland planning to replace the one-size-for-all state regulations that prove to be ineffective as well as coercive in implementation. The theoretical aspect of this paper challenges the state-centric technorationalism underpinning the dominant planning discourse in contemporary China and accordingly advocates a social learning approach as demonstrated in this study.

The remainder of this paper is organised as follows. In section 2 I reflect critically on the state-centric technorationalism permeating the dominant planning discourse in contemporary China, in light of which three fundamental dilemmas underlying the issue of farmland conversion are elaborated. Following that, in section 3 and 4 I give a brief presentation of the research methods employed in this study. Three cases from Shanghai, Guizhou, and Henan, respectively, are then reported in section 5, with findings summarised and discussed with reference to the construct of ‘barefoot planner’ in section 6. At the end of the paper, in section 7, a series of policy recommendations are suggested alongside the academic implications of this study for planning scholarship.



2 China planning, social learning, and barefoot planners

Planning discourse in contemporary China arguably features a state-centric technorationalism. As Zhang et al (2012) point out, urban planning is widely regarded in China as a professional, technical, and state-serving project. The literature on China planning, correspondingly, tends to focus on state-led megaprojects in major cities and regions (Duan, 2011; He and Zhang, 2011; Wu, 2000), with much less attention paid to the everyday planning practice which, albeit often informal or even illegal, has been shaping the Chinese urban landscape from the bottom up (Leaf and Hou, 2006; Schubert and Ahlers, 2012; Tang and Chung, 2002; Wang and Scott, 2008).

The dominance of formalistic planning discourse in China has both institutional and ideological reasons. First and foremost, according to Zhang (2000), most urban planners in China tend to be public employers, who usually conduct either land-use management or physical spatial design, two essential functions reserved by the state to orchestrate and control urbanisation. Second, planning education in China is characterised with a much stronger emphasis on technical training, especially on design skills, than on the “social purpose in the underlying normative vision of urban planning” (Leaf and Hou, 2006, page 574). Third, researchers such as Tang (2000, page 355) also attribute the situation to the legacy of socialist planning ideology, mainly transplanted from the former Soviet Union in the 1950s, which, to a large extent, still influences the professional value regarding what urban planning is and whom urban planning serves in the postreform China.

From a more generic planning theory perspective, the aforementioned state-centric technorationalism underpinning planning discourse in China may also be considered a sign of high modernism as:

“A strong, one might even say muscle-bound, version of the self-confidence about scientific and technical progress, the expansion of production, the growing satisfaction of human needs, the mastery of nature (including human nature), and above all, the rational design

of social order commensurate with the scientific understanding of natural laws” (Scott, 1998, page 4).

Like Scott, Friedmann (1987) was wary of this kind of high modernism in his seminal review of four intellectual roots of Western planning theory—namely, policy analysis, social learning, social reform, and social mobilisation. He identified and analysed the four canons of planning theory quite purposely, in view of invoking a general intellectual transition from the more technical value-neutral realm of policy analysis to the more political value-laden aspect of urban planning in terms of catalysing progressive social reform and mobilisation (Hoch, 1990). Embracing a social learning approach to policy analysis is considered by Friedmann (1973) as a key step toward such transition and a core characteristic of what he called ‘transactive planning’:

“This style of social practice has been called transactive planning, designating a process by which a scientifically schooled intelligence joins with the personal knowledge of the affected population in the process of social practice (Friedmann, 1973). It is through transactive planning that social practice discovers how to deal with a specific problem. Social practice may thus be understood as a process that generates not only a new and tangible reality but also the means of acquiring new knowledge about it. *Social practice is a process of generating social learning* (Wakely et al, 1976)” (Friedmann and Abonyi, 1976, page 938, original emphasis).

A quite similar, albeit much less documented, theoretical proposition arose later from Zinn et al’s (1993) study of planning education in a globalisation context. Like Friedmann, they called for learning in situ from the often informal planning practice by local people rather than relying solely on expert planning knowledge:

“the barefoot planner approach ... [is to train planners to have] a simple set of tools and selectively apply them to understand and develop locally appropriate solutions to problems. It also promotes the ‘practice of practice’, and reflection on the process, as a means to equip the practitioner to operate effectively in new or unique situations (Schon, 1983)” (Zinn et al, 1993, page 561).

One may argue that this kind of barefoot planner approach, as an example of social learning, is indeed much needed in China, especially given the dominance of state-centric technorationalist planning discourse vis-à-vis the pervasiveness of informal and sometimes even illegal local planning practice (Deng and Huang, 2004; He et al, 2009; Tang and Chung, 2002; Wang and Scott, 2008; Wu, 2011; Wu et al, 2012). A shift of intellectual focus from the state-centred planning formalities to the grassroots-based planning informalities thus not only has important practical implications but also suggests a fundamental critical rethinking about the “epistemology of planning”, against a formalist planning ideology which presumes the unconditional superiority or legitimacy of certain “models and best practises” (Roy, 2005, pages 155–156).

To operationalise this kind of *ideologiekritik* (Guess, 1981), academic planning research needs to be reoriented toward such actors as local entrepreneurs, small planters, and community leaders, who, among others, often exercise informal ‘barefoot planning’ as “barefoot planners”, analogously to those unaccredited and the so-called ‘barefoot doctors’ who see patients in the Chinese countryside (see, eg, Sidel, 1972). In this spirit, in the rest of this paper I study the phenomenon of farmland conversion in China’s urban periphery, starting from three inherent dilemmas underlying the issue, in hopes of identifying solutions through social learning from informal local planning practice.

3 Three farmland dilemmas

The past three decades in China have seen a considerable move away from central planning, with market-led development, deregulation, and retreat from socialist ideology (Yeh and Wu, 1999). Decision making on land use conversion, however, has remained relatively centralised. Preserving farmland is China's long-term nationwide land-use policy, according to Article 3 of the Land Management Law (National People's Congress, 1998). However, the implementation of this policy has been seriously impeded in practice (Lichtenberg and Ding, 2008; Wang and Scott, 2008). Enforcement is difficult, especially in China's urban periphery, where farmland use often involves conflicting interests, leading to a series of seemingly intractable dilemmas. Formal top-down interventions by professional planners, more than often, prove to be ineffective, given the fundamentality of these dilemmas.

3.1 Food security versus public finance

The most primary dilemma concerns the national preoccupation with food security versus the local reliance on farmland conversion as a major source of public finance. Historically speaking, farmland scarcity has been a long-standing issue in China, especially given the country's huge and still growing population since 1949 (Yang and Li, 2000). China's arable land per capita in 2007 was 0.105 ha only—equivalent to about half of the global average. This explains why the Chinese authorities have always considered food security a major challenge. Not only is farmland preservation clearly stated in Article 3 of China's Land Management Law (National People's Congress, 1998) as a long-term nationwide land-use policy, but the latest national five-year plan (2011–15) also declares an aim to maintain a minimum stock of 121 million ha of cultivatable land and continue to strictly protect farmland (National People's Congress, 2011).

However, unlike the central government in Beijing, local authorities are usually reluctant to freeze farmland conversion, mainly for financial reasons. Farmland in the urban fringes are considered 'gold mines'; for once developed for urban uses, it would yield huge revenues in the real estate market (Tang and Chung, 2002). Such land-based revenues have become an indispensable source of local public finance—as well as illegal private income⁽¹⁾—through the state-led land expropriation procedure (Cartier, 2001; Li, 1999; Zhu, 1999).

An important way to understand the local authorities' attachment to farmland conversion is to look at the current taxation system implemented in China since 1994 (Zhu, 1999; 2004a). Before 1994, the old taxation regime in China was highly centralised, with almost all local taxation income submitted to and redistributed by Beijing. However, the 1994 taxation reform, led by the then prime minister Zhu Rongji, devolved much more power to the local governments by setting up three categories of taxes: central, local, and shared taxes between the central and local authorities (Tsang and Cheng, 1994). The localities were henceforth allowed to tax capital-added values from land and property transactions as well as business and personal incomes (Tsang and Cheng, 1994, page 779). Converting farmland to business uses, in this sense, not only generates more local taxes from the property market, but also enlarges the local business and income tax base. In the meantime, a direct consequence of the 1994 taxation reform is that Beijing tends to intervene less in the local public finance; the localities are becoming more and more self-reliant. Within this background, almost all local bureaucracies choose to depend more on farmland conversion for government income. This is particularly the case for the poorer, less developed, and agriculture-intensive inland provinces, which used to enjoy substantial fiscal subsidies from Beijing but now have to start living on their own (Zhang, 2006).

The conflicts in farmland use strategies between the central and local government has led to a number of scandals. A very notorious case is about Tieben Iron Co Ltd, a steel

⁽¹⁾See, for example, Gong (2006) on land-related corruption in China.

factory invested and owned by the government of Jiangsu Province (*China Daily* 2004). In order to build up Tieben, the provincial government expropriated a total of 436 ha of farmland in 2003 through multiple acquisitions, each involving a subdivision of less than 35 ha. This was to circumvent Article 45 of the Land Use Management Law, which requires any local conversion of more than 35 ha of farmland to be approved in advance by the central government (National People's Congress, 1998). Although this illegal conversion was later discovered and penalised, the case reflects a fundamental discrepancy between the central and local authorities in terms of how to deal with farmland.

3.2 Transition versus deprivation of livelihoods

The second dilemma concerns local farmers' livelihood transition. While the most vulnerable farmers in China's countryside still rely on farming for survival, many more have opted for off-farm livelihoods. Farmland conversion often brings industrial and commercial jobs to rural people and lets them earn much more income than farming (Wang and Scott, 2008). Farmland, in many cases, has also become the local people's de facto collateral to attract and retain external capital. This trend has become even clearer since the 1990s, when many township and village enterprises (TVEs) went through their life cycles and transformed from labour-intensive businesses to ones anxious for capital. The comparative disadvantage of TVEs (ie, versus the state-owned and foreign enterprises) in borrowing formal bank loans has since then propelled many rural communities to put farmland at stake, in the hopes of attracting quick external investments (Perotti et al, 2010).


However, not everyone can easily adapt to off-farm livelihoods. Nor does everyone agree to give up farmland for the sake of economic development. The elderly, less educated, and ethnic minority farmers are often most susceptible to the various changes brought about by farmland conversion (Guo, 2001; He et al, 2009; Ho, 2003; Wang and Scott, 2008). Because of their *hukou* (registration status), farmers are generally excluded from the more favourable urban health care and pension schemes (Li, 2006; Shi, 1993; Zimmer and Kwong, 2003). However, under the household responsibility system (HRS), the contracted farmlands (usually for fifteen to thirty years) can ensure many farmers' basic subsistence, while the rural collective administration weaves a local social safety net for them (Krusekopf, 2002; Kung, 2002; Zweig, 1997). To the most vulnerable farmers, losing farmland often leads to a further demise of their customary social security system, hence a deprivation of their basic needs.

In this vein, it is not hard to understand the frequency and intensity of farmland-related disputes in China, especially those between the state and the rural grassroots (Cai, 2001). Contentions arise typically when the local authorities try to convert farmland through forced displacements of farmer households or compulsory land purchase⁽²⁾ with insufficient compensations (*Xinhua Net* 2005a; 2005b; 2011). However, on quite a few occasions the local officials and farmers have also been found to collaborate closely in the course of farmland conversion, sometimes even collectively defying the formal national land-use laws (eg, Wang and Scott, 2008).

3.3 Regulated versus negotiated preservation

The third dilemma is more strategic, primarily focused on why and how farmland should be preserved in China. Boland (2000) documents the debates between those for and against China's conservatism with regard to farmland use. While the supporters claim their


⁽²⁾According to Article 43 of Land Management Law (National People's Congress, 1998), almost all types of nonagricultural construction must be carried out upon state-owned land, which means farmland belonging to the rural collectives under HRS must be expropriated by the state before any land-use conversion. See, for example, Qu et al (1995) for more details about China's land tenure system.

endorsement more from the angle of national food security and sovereignty, the critics consider China's policy economically inefficient. For example, **Yushi Mao**, a libertarian economist and policy commentator, alleges that there is no such food crisis in China as predicted by Brown (1995). According to Mao (2005), not only has China's food stock been expanding, but the country can even afford food imports given its ample reserve of foreign currencies. He thus criticises China's farmland preservation policy as being overly pessimistic and hindering urbanisation, which tends to cost even more than importing food. 

While Mao (2005) represents a minority perspective in China, especially since the dramatic increase in global food prices in 2007–08, there are indeed more and more reflections regarding how farmland preservation should be implemented in China. For instance, Lichtenberg and Ding (2008) find that a substantial amount of farmland has been lost notwithstanding the stringent state regulations, because:


“The fundamental problem with these policies is reliance on administrative measures that are simply unenforceable in practice in the face of existing incentive structure. The central government wants local governments to promote economic growth, provide infrastructure and services for a growing population, and exercise sound fiscal management. Under the existing system of land allocation, farmland conversion is the most attractive means of furthering all of these objectives” (Lichtenberg and Ding, 2008, page 67).

They thus call for “aligning [the] incentives” (page 67) of the involved parties for a more effective implementation of the farmland protection policies. In a similar spirit, Wang and Scott (2008, page 327) also point out that, “whereas the state government still manages to intervene in the local conversion of farmland, such intervention is increasingly ineffective as economic liberalisation intensifies.” One important solution, according to them, is to negotiate and reconcile the interests between the government, business, and local farmers.

However, to enable such negotiation, the state needs, in the first place, to forego any rigid goal or ‘red line’ (Yang, 2012) in terms of maintaining a minimum stock of farmland. Many, however, fear that, without such strict command and control, the loss of farmland may be further exacerbated. In a broader context, negotiation between the state and the civil society also requires a relatively pluralist political environment, which is arguably emerging but is still nascent in present-day China (Wu, 2011). **Plummer and Remenyi (2004)**, for example, identify numerous challenges for enhancing local government capacity for community participation. 

4 Going into the field

4.1 Research question and methods

Is it possible to resolve in practice these seemingly intractable farmland dilemmas? This is the central research question for this study; and, to answer it, a social learning approach was adopted, and three fieldtrips were made in the summers of 2009 and 2012. The purpose of these fieldtrips was, (1) to identify cases involving some actual solutions to the three aforementioned farmland dilemmas in China; and, (2) to seek a detailed account of the motives, procedures, and outcomes of these events. A case-study method is best applied to find exceptions rather than to make generalisations (Flyvbjerg, 2001; Popper, 2002 [1959]) and seems to best fit the intention of this study, in that it seeks to target a limited number of cases rather than a sizable sample of observations. Moreover, gaining an in-depth understanding of the cases requires the researcher to interact closely and establish rapports with the local actors (**Springwood and King, 2001; Wood, 2001**). Because connections and trust take considerable time and resources to build up, only a small number of cases could be included. 

4.2 Site selection

Three sites were selected within mainland China for fieldwork (see figure 1). The first site is an agroindustrial park in the west periphery of Shanghai Municipality. Shanghai is located along the east coast of China and is one of the country’s largest cities. The second site includes two ethnic Miao communities in the periphery of Kaili, a small (albeit the capital) city of an

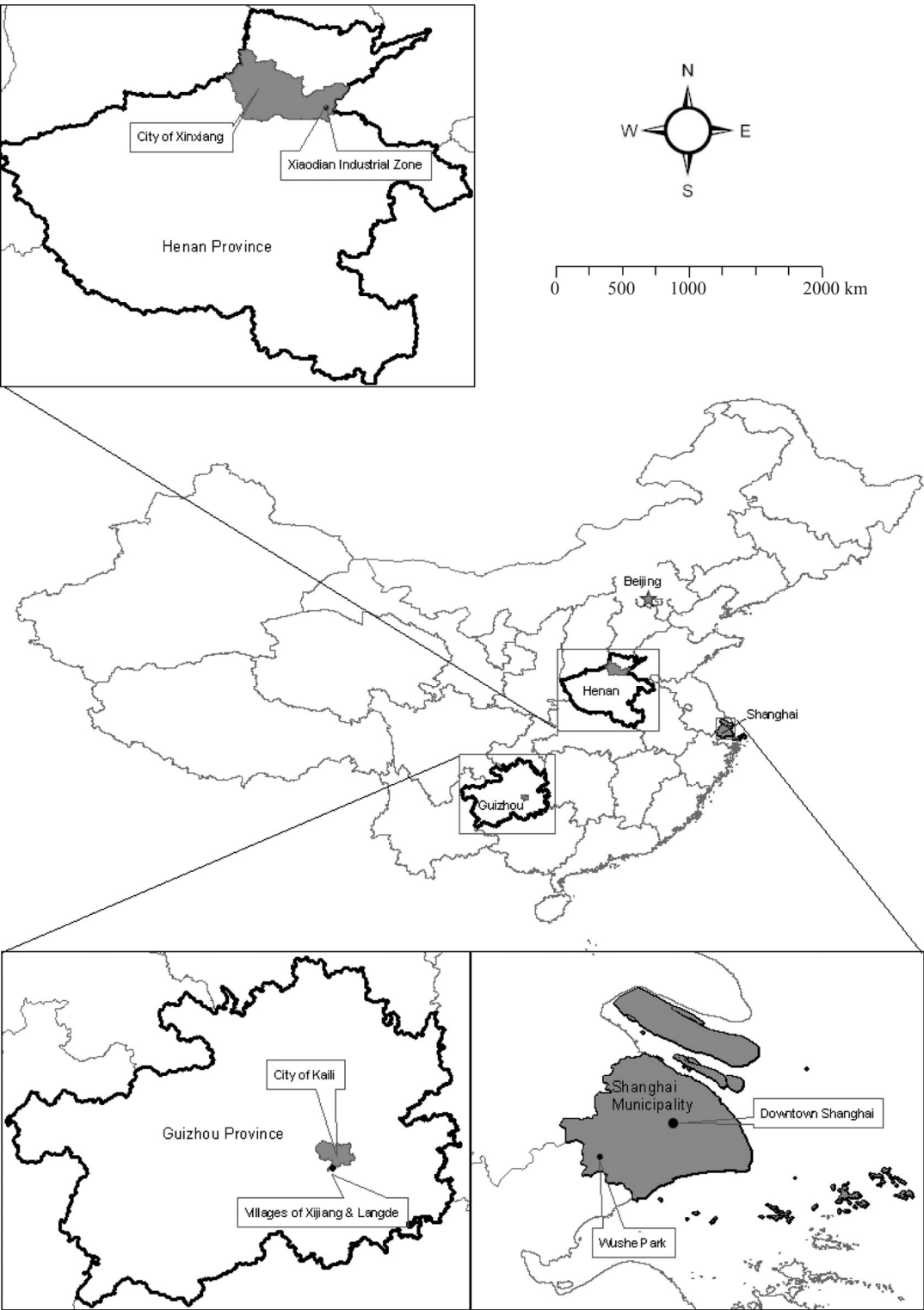


Figure 1. Sites of study.

ethnic autonomous prefecture in southwest China's Guizhou province. The third site is an industrial development zone to the east of Xinxiang, a medium city within central China's Henan province.

The three localities were chosen, mainly⁽³⁾ because they represent different types of cities in China (see table 1). For example, Shanghai is a typical major city with its population and GDP many times higher than that of Kaili and Xinxiang. In contrast, Xinxiang has almost three times the cultivated land area than in Shanghai, exemplifying those inland medium cities which are often surrounded by a vast rural area. Kaili is the smallest city of the three, while its residents are primarily ethnic minority, with a very low level of GDP per capita.

Table 1. Basic information about the three study sites, 2008 [sources: The People's Government of Municipality of Shanghai (2010); The People's Government of Xinxiang (2009); The People's Government of Kaili (2009)].

Characteristic	Shanghai	Kaili, Guizhou	Xinxiang, Henan
Level of jurisdiction	provincial	prefectural	prefectural
Population (million)	18.88	0.47	5.61
Approximate GDP (\$billion)	228	1	16
Farmland (1000 ha)	205.00	13.16	596.90

4.3 Fieldwork

The fieldwork was mostly conducted in the summers of 2009 and 2012. More than thirty open-ended interviews and focus groups were conducted with more than sixty local officials, farmers, and business people across the three localities, both in formal and informal settings.⁽⁴⁾ Several structured questionnaires had actually been prepared before the fieldtrips, but they were soon found out to be overly limiting and adapted later in order to give the respondents more freedom during the conversations. After doing so, the rigid 'interviewer-versus-interviewee' positionality seemed to dissolve and more insightful information was collected in the end (Mullings, 1999; Stroh, 2000).

5 Negotiating the farmland dilemmas: three cases

5.1 The case of Wushe

Wushe agroindustrial park is located in the southwest periphery of Shanghai. The park was owned and managed by the local government. When Wushe was set up in 2001, the authority did not intend to run it as a business. Instead, the park was supposed to preserve 7.22 ha of arable farmland and to experiment with high-tech modern urban agricultural industry. Another implicit motivation, according to a park official, was to create jobs for farmers in the nearby villages, where the rapid expansion of Shanghai had encroached most of the local farmlands (Zhang, 2000). Though younger farmers in the localities had quickly moved to the secondary and tertiary sectors, most of their elderly counterparts knew how to live only by farming and thus constituted the majority of the employees in Wushe during the first few years after 2001.

At that time, as an official recalled, the park could hardly make any profit and had been heavily subsidised by the state. After 2005, the city government began to reduce the financial support and wanted the park to generate more income itself. Meanwhile, the cost of labour and the cost of living were soaring as a result of the fast economic growth in Shanghai. Many local farmers chose to stay at home, because of the insufficient wage offered by the park.

⁽³⁾ Personal and institutional connections with the key local respondents, especially the local government agencies, constitute another important reason for choosing the three cities.

⁽⁴⁾ Given concerns as per research ethics, the detailed background information of these respondents such as their actual names and job titles are not given here.

Competition was also becoming more fierce in the agricultural market. Cheaper imported foods (eg, wheat from Canada and America) undercut the cost of the local produce. To survive, between 2005 and 2009, almost all of the farmland in the park was subdivided into small parcels and contracted to private parties, mostly Chinese business people from outside Shanghai.

Interview records suggest that a typical contractor paid a lump sum to rent an area of farmland for three to five years at a cost of RMB 1500–2000 (circa US \$250–333) per square metre per annum. Any nonagricultural land use was clearly forbidden in the contract.⁽⁵⁾ Many contractors took good advantage of the park's location, which was only 45 km away from downtown Shanghai, allowing easy access to the city market at an affordable transport cost. Others, however, were struggling. For example, a contractor planting organic rice had faced fierce price competition in the Shanghai market, so he decided to change his business model. He found out from the newspapers that many white collar workers who work in the inner city would rather spend their weekend in the countryside, planting for fun. So he quickly had a plan to build a small guesthouse to accommodate the weekenders and attract them to Wushe. Nevertheless, both the laws and his contract with the park stipulated that farmland could not be converted to other uses. When he consulted with the park officials, to his surprise, his business plan was actually endorsed and even encouraged. The park officials told him to start building the guesthouse, while they would seek a special planning permission in the meantime. A new contract was signed, stating that the guesthouse must be modestly sized and profits shared with the local authority. When the author visited the guesthouse in summer 2009, it had two storeys and contained about fifteen double rooms. A small team of local youngsters were working as porters and maids in it.

Following the building of that small guesthouse, agricultural tourism quickly became a major revenue earner within Wushe. In most instances, the park management committee, on behalf of the local government, allowed the contractors to conduct small-scale farmland conversion, but used contractual terms to restrain the actual extent of property development on a case-by-case basis. When asked about the legal implications, a park official answered: "We have got most special planning permissions from the superiors, while others are still being processed This is a tricky matter, but we have to build up something to develop agricultural tourism."

5.2 The case of Xijiang and Langde

Guizhou is a mountainous inland province in southwest China. Although most of its population are Han (the dominant ethnic majority in China), the southeast part of Guizhou has historically been inhabited by ethnic minorities. The region is thus designated as an ethnic autonomous prefecture, with the city of Kaili as its capital. Xijiang and Langde are two rural communities located in the south periphery of Kaili. More than 90% of the local population is ethnic Miao—an ethnic group that used to live isolated in the high mountains nearby. Both Xijiang and Langde are endowed with some unique natural as well as cultural landscapes, which are highly attractive to tourists.

Since the 1990s, the Guizhou provincial government has adopted an ethnic tourism strategy to promote the local economy and to alleviate poverty in the ethnic minority region (Donaldson, 2007). Southeast Guizhou thus witnessed extensive local infrastructure development, including a new motorway built through the mountains. Soon after the road was finished in 1999, Xijiang and Langde were packed with a large crowd of domestic as well as international travellers, demanding hotels, restaurants, and even Karaoke clubs. Some farmlands would need to be converted to make space for these facilities.

⁽⁵⁾In accordance with Article 63 of the Land Management Law (National People's Congress, 1998) and Articles 32–43 of Rural Land Contract Law (National People's Congress, 2002).



Among the two ethnic Miao communities, Xijiang is the larger one, with 1288 local households and nearly 6000 residents. The extent of farmland conversion in Xijiang has been notable in recent years. Between 2007 and 2010, the stock of agricultural land in Xijiang decreased from 17800 to 17550 ha. The local respondents confirm that almost all of the farmland at the skirts of the surrounding mountains was converted to tourism facilities, mostly through compulsory land acquisitions organised by the local government. A state-owned tourism development company was also set up in 2009 to manage these properties. About half of the local households in Xijiang were affected directly by the land expropriation. Many of them received compensation for their farmland and later used the money to rent the guesthouses built by the tourism management company. Several former farmers, in this way, turned into quite successful businessmen. As one of the local contractors admitted during an interview, “making a million [RMB] per year is even possible here!” This understandably has made the other half of the local population a bit jealous, because their farmland parcels are up on the mountains and were not taken by the state: “We can only make the ends meet here up the hill”, said one respondent.

On the other hand, not all expropriated farmers were content with their circumstances. One farmer in his sixties indicated that he would rather have his small land parcel back, because he could not do anything other than farming. He said he was illiterate and, as an elderly Miao, could only speak limited Mandarin. It was thus beyond his capability to cater to tourists. Although this farmer did receive some land compensation from the state, he soon realised that the money would not stretch very far: “Everything becomes more expensive after the tourists swarm in”, he grumbled.

Compared with Xijiang village, Langde has seen a much lower degree of polarisation among the farmers. This is perhaps because tourism development in Langde has been quite spontaneous and self-organised; no farmland was ever expropriated. While the amount of local agricultural land did decrease by about 50 ha from 2007 to 2010, most farmland conversions seemed to be conducted on a very small scale. Typically, rather than build a modern hotel, a local family would share its traditional log house with the tourists and provide them with customary ethnic meals.

As a village of only 530 residents, Langde is a small but close-knit ethnic Miao community. Almost all of the local farmers live off farming; tourism is their supplementary economic activity. The local villagers generally hold a strong priority in maintaining their original lifestyle and have collectively bargained with the government to refrain from large-scale development, by emphasising that the authentic local ethnic cultural heritage is what actually appeals to the tourists. However, as a result, people in Langde earn much less tourism income than their neighbours in Xijiang, primarily as the result of underinvestment by the local government. Unlike Xijiang, Langde does not have a state-backed tourism management company that can bring in capital to finance the development of local infrastructures such as lodges and restaurants. Per capita tourism income in Langde was estimated to be merely 206 RMB (circa US\$33) in 2010, compared with 5437 RMB (circa US\$863) in Xijiang.

5.3 The case of Xiaodian

Xiaodian is an industrial development zone to the east of Xinxiang, a medium-size city in central China's Henan Province. Xiaodian was formally approved to operate in 2003. By that time, all of the farmland within Xiaodian had been expropriated by the city government and was pending conversion. The plan was to attract businesses to the locality to set up factories that could absorb the surplus rural labour. But by summer 2009 there were only a handful of small cotton processing plants in the area. Most of the workers were young local women whose husbands and brothers either worked elsewhere or stayed at home, living off the compensation they had received a few years ago for the expropriated farmland.

Despite its designation as an industrial zone, it was striking to see sporadic grain fields inside this area, where some elderly farmers were busy working. According to the farmers, these land parcels used to belong to their village and were later taken by the government, but since then remained unused for years. They thought it was such a waste and started planting on the land again. The local officials had allowed them to keep the crops. Several old farmers also stressed that they were not planting for money. Rather, they had been so used to farming that they felt uncomfortable not doing so.

A city land official working in the industrial zone confirmed this situation later. She admitted that, in the official land-use plan, these parcels were designated as state owned and for industrial use only, but “planting it is better than leaving it vacant”. She recalled that, when the Xinxiang government first heard of this incident, her colleagues in the city did debate about how to respond. But finally they decided to simply acquiesce, because the city government was also under pressure to meet the food production quota⁽⁶⁾ assigned by the provincial authority. “Our province is a major food supplier in the country and every year we need to meet certain quotas”, explained the official, “but doing so doesn’t make us richer and farmland conversion tends to be discouraged by the central government.” The city authority was afraid of repercussions from Beijing, if this ‘waste’ of farmland was publicised.

So the deal was that the farmers could freely work the unused farmlands and sell the products to the state, but the farmers’ access to land would never be officially registered or protected. This arrangement had to be made ‘under the table’, because the land parcels had already been expropriated and assigned to industrial use in the official plan. More importantly, had the city followed any formal procedures, officials in Beijing would have found out.

How was this deal actually negotiated between the local authorities and the farmers? Members of the local village committee told a story. After hearing the city government’s decision, the village committee first persuaded local residents to let poor elderly villagers have these parcels, because, in Chinese culture, it was considered shameful to compete with elders and the vulnerable. Moreover, most of the young people in the area wanted to leave the farms and even the villages. “The kids wouldn’t plant the land even if they had it”, said one village committee member in his forties. Second, among the poor elderly, the committee prioritised those who had planted in the vacant parcels before. “They used to plant there for decades; everyone agrees it is their land”, said another cadre member. Third, in return, the village committee asked the cultivators to share a portion of their profits within the village, though the actual percentage varied case by case. When asked whether there was anything written, even just as an informal covenant, the female head of the village committee indicated that many seniors were illiterate: “we just rely on trust”.

6 Learning from ‘barefoot planners’

6.1 Informal planning solution

As summarised in table 2, informal planning solutions seem a common element across the three cases reported above. In the case of Wushe, a state-led agroindustrial park chose to negotiate, under financial pressure, with private farm contractors. While the former did intend to preserve farmland and produce food, reduced government subsidies and fierce market competition had forced it to seek an alternative source of revenue. The private contractors

⁽⁶⁾The central government in China tends to monopolise the food market by purchasing grains from farmer households across the country at a price level set by the state (Oi, 1991). Although some market-based mechanisms have been adopted in the recent years (eg, Xinhua, 2012), this is still a semicompulsory food production system administered by the different levels of government. For example, in this case Henan is a major agricultural province that has always been assigned a large food production quota by Beijing. The provincial government thus further allocates its quota to the lower levels of authorities within its jurisdiction.



Table 2. Informal solutions to the farmland dilemmas

Case	Wushe	Xijiang/Langde	Xiaodian
Dilemma	conserving farmland for national food security versus converting farmland to raise local government income	facilitating farmland conversion to encourage farmers' transition toward urban livelihoods versus protecting farmland to ensure the most vulnerable farmers' basic living conditions	preserving farmland through strict nationwide regulatory controls versus managing farmland through localised negotiations among stakeholders
Informal planning solution	local officials allowing farmland conversion but using specific contractual terms to control the extent of conversion	ethnic minority farmers managing to develop local tourism while retaining the traditional livelihoods and resisting state-led land expropriation in order to protect their cultural heritage	members of village committee facilitating the negotiations between the city government and the local farmers, enabling the latter to plant on the farmlands already expropriated by the state
'Barefoot planner'	entrepreneurial park; officials and small farmland contractors	ethnic minority farmers	village committee members

took this opportunity to change the use of their farmland subdivisions, not by directly applying for a planning permission but by amending the terms of their contracts with the Wushe Park. In return, the park officials managed to control the scale of farmland conversion on a case-by-case basis, using arm's-length bilateral agreements.⁽⁷⁾ What characterised both parties was a strong spirit of entrepreneurship, as reflected in their mutual interest to try out a new business model notwithstanding the rigid land-use regulations. The outcome was a kind of localised reconciliation of the dilemma between food security and public finance, in the sense that most of the farmland ended up retained, while a small portion was converted to generate revenues from agricultural tourism.

In the case of Xijiang, the primary issue appeared to be the local peoples' polarised situations after the state-led farmland conversion. Those who could adapt to the change of livelihoods saw a substantial rise in their income, thanks to the booming local economy. For more vulnerable farmers, however, the transition challenged their basic living conditions. A dilemma in terms of farmer livelihoods thus clearly arose in Xijiang. However, the experience of the nearby Langde Village provided a potential solution. Also by developing ethnic tourism, Langde featured an informal and voluntary model involving very little state intervention. Local farmers in Langde used their own houses to accommodate the visitors and refrained from converting farmland for large-scale constructions. As a result, Langde saw a much less drastic transformation in terms of the local farmers' livelihoods. Most people in Langde continued to major in plantation, while ethnic tourism became their ancillary livelihood.

In the case of Xiaodian, the local government took away a large division of farmland to establish an industrial development zone that failed to draw business. The local authority dared not publicly return the farmland to the local village, for fear of repercussions by Beijing. Instead, the local officials acquiesced the informal, spontaneous farmland reclamation by the elderly villagers. Although no contract was written, verbal deals were made between the bureaucrats and the local farmers, coordinated by the village committee members. In this case,

⁽⁷⁾ This is analogous to the use of a set of private covenants to substitute for formal zoning regulations in some US localities (Fischel, 2001; 2004).

what saved the farmland was not the central government's strict regulation, but rather the local parties' willingness to negotiate.

In summary, each of the three cases involves some informal actions, which resulted in a locally sound resolution of the seemingly intractable dilemmas related to farmland conversion. While findings from these cases should in no way be generalised beyond their contexts, they do suggest that good solutions to 'wicked' (Rittel and Webber, 1973) planning problems can often be learnt from the practice.

6.2 Who are the 'barefoot planners'?

A closer look into the three cases also reveals some key actors who play the pivotal role of barefoot planners in addressing the farmland dilemmas within their own specific context (see table 2). In the Wushe case the barefoot planners were the entrepreneurially minded local officials and small contractors who planned the farmland conversion by revising their business agreements. In the Langde case the barefoot planners were the ethnic minority villagers who planned the local tourism development by refraining from extensive state-led farmland conversion. In the Xiaodian case the barefoot planners were the local village committee members who planned the farmland retention by coordinating the socioeconomic relations within the village. While none of these actors is a formal professional planner, he or she is indeed a barefoot planner, in the same sense that unaccredited doctors who see patients in the Chinese countryside are called 'barefoot doctors' (see, eg, Sidel, 1972).

As mentioned at the outset of this paper, 'barefoot planner' is not an entirely new construct in the planning literature. The idea is deeply rooted in a classic canon of planning scholarship—that is, social learning (Friedmann, 1987). The term 'barefoot planner' is even specifically used and elaborated in a couple of important papers about international development planning (Oberlander, 1987; Zinn et al, 1993). In this sense, while the barefoot planners in the above three cases probably do not even know they were planning farmland use, their stories are indeed worth studying to better inform planning education and research.

6.3 Toward a social learning turn in China planning

An even broader implication of this study is that it demonstrates social learning as an alternative approach to understanding and reconstructing the discourses about urban planning in China. Bottom-up informal planning practice has been largely underplayed or even neglected in the existing state-centric technorationalist discourse, partly because of the general mode of planning research in China, in which planning knowledge is very much transferred as a commodity only between the elite bureaucrats and technical experts, leading to its disconnection from the often locally contextualised 'social values', 'political strategy', and 'social action' (Friedmann and Abonyi, 1976, pages 930–933). In this vein, the failure of official farmland planning regime mentioned in this study can indeed be attributed to a lack of social learning in the contemporary China planning scholarship. Yet, as shown in this study, once we manage to escape from a 'Euclidean' (Friedmann, 1987) obsession which sees planning merely as preparing technical documents, and try instead to proactively learn from actual planning practice by barefoot planners, we see a host of sound localised planning resolutions to those seemingly intractable farmland use policy dilemmas.

7 Conclusions and policy recommendations

Drawing on three cases of informal farmland use planning, we identify some local solutions to a series of fundamental dilemmas related to farmland conversion in China's urban periphery. The first case shows that private land-use contracts can be more effective than state regulations in flexibly controlling the extent of local farmland conversion, while still contributing revenues to the local public finance. The second case suggests that, compared with compulsory land acquisition, voluntary spontaneous land-use decision making may lead

to a more equitable outcome in terms of local farmers' livelihoods. The third case indicates that farmland can be preserved on the basis of local consensus rather than by enforcing strict land-use laws from top down.

While findings from these cases are admittedly anecdotal, they have a couple of important implications, however. First, under many practical circumstances, informal planning by barefoot planners—such as local officials, ethnic minority farmers, and village cadre members—seem to better resolve those practical challenges faced by professional planners. Second, learning from the barefoot planners not only allows us to identify practical solutions to some seemingly intractable farmland dilemmas, but also gives us the confidence to call for a more general transition toward social learning as a new mode of planning scholarship in contemporary China to counteract the dominance of state-centric technorationalism. A social learning turn in China planning, so to speak, is hoped to trigger more reflexive intellectual engagements with the various planning informalities which have been taking place at the grassroots and local level and have been shaping the Chinese urban landscape from the bottom up vis-à-vis the state-led planning formalities.

In a more pragmatic sense, planning research is ultimately about what action can be taken to make a substantive difference. For this purpose, a series of policy recommendations are recommended as follows:

- (a) The public administration of farmland use in China needs to be more flexible. More contract-based land-use management (as in the case of Wushe) and market-based intervention can be introduced into the system instead of entirely relying on command and control. One way to do so is to allow transactions of farmland conversion rights, as already experimented, for example, in east China's Zhejiang province (Wang et al, 2010).
- (b) The state monopoly of farmland conversion needs to be critically reviewed in reference to Article 43 of the Land Use Management Law (National People's Congress, 1998), which limits almost all types of farmland conversion to the eminent domain. A review of this legal term is most important to ensure social harmony and also the efficiency of governance (Osborne, 1993). As shown in many incidents, compulsory land acquisitions often coerce farmers and result in serious social polarisations as well as contentions. If the rural grassroots are given more rights to decide local land use, it is reasonable to expect some more desirable social and environmental consequences (as in the case of Langde).
- (c) It is also necessary to reassess the rationality of farmland planning in China, which arguably features an obsession with nationwide formalised planning strategies and one-size-fits-all public policy making. Such one-plan-for-all rationality is indeed a reflection of the state-centric technorationalism underlying the dominant planning discourse in China. To address this issue, professional planners ought to learn from and even try to become barefoot planners, who mainly resolve issues through informal local negotiation and consensus building (as in the case of Xiaodian). In this sense, some directional changes are quite necessary in China's overall planning education system, which tends to overfocus on formal spatial planning and design, but with far less attention paid to social learning from grassroots-based planning informalities as everyday planning practice.

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